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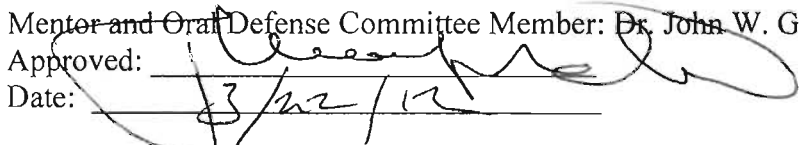*Quantico, Virginia 22134-5068*

MASTER OF MILITARY STUDIES

"TOTO, WE'RE NOT IN KANSAS, ANYMORE":
HOW THE COMMUNICATION LANDSCAPE HAS CHANGED AND
WHY ORGANIZATIONS MUST ADAPT

SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
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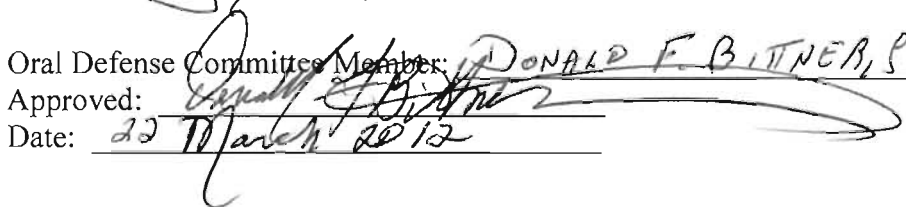
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EXECUTIVE SUMMARY

Title: "Toto, We're Not in Kansas Anymore": How the Communication Landscape Has Changed and Why Organizations Must Adapt

Author: Major Carrie Batson, United States Marine Corps

Thesis: Today's communication landscape enables average citizens to communicate, collaborate, and mobilize at a speed and scale never seen before, thereby presenting both unique opportunities and challenges to organizations as they pursue their goals.

Discussion: In the early 2000s, new communication technology and social media platforms sparked a radical and irreversible shift in how humans receive and share information; how they communicate with each other; and how they form opinions and groups. No longer confined to a broadcast or narrowcast model, the communication environment is now best described as a massive network. This networked communication model, enabled by participatory media, has changed how people around the world communicate. Citizens actively create and share online content, mobilize group action, and seek news and information from digital sources at a time and place of their choosing. This "democratization of information" means that organizational communication has become exponentially more challenging, and that organizations have lost any ability to control content and information flow. Power and authority continue to shift to the individual and away from traditional sources such as governments, businesses, and other institutions. Credibility also has shifted as citizens become increasingly skeptical of what used to authoritative information sources. Despite these challenges, new communication tools provide organizations with benefits that include the ability to engage and dialogue with their key publics. Three case studies further illustrate these opportunities and challenges.

Conclusion: Governments, businesses, non-profits, and other organizations must adapt to changes in the communication environment. Though communication has become an increasingly complex endeavor, it remains an endeavor vital to organizational success.

PREFACE

"The only constant is change." This adage proves as true today as when the Greek philosopher Heraclitus (c. 535 B.C. - 475 B.C.) first expressed it. Yet, sometimes the significance of change is not fully recognized or understood. This paper seeks to describe the implications of today's rapidly changing communication environment. It will assert the need for institutions—including the Marine Corps—to understand and adapt to these changes.

I would like to express my appreciation to my thesis advisor, Dr. John W. Gordon, for his guidance and patience. I also am indebted to my husband and parents for their support throughout the writing process. Despite the great physical distances between us, their encouragement was always present.

Introduction

On May 2, 2011, an information technology consultant named Sohaib Athar heard a helicopter hovering near his home at 1 a.m. Pakistan Standard Time. Such an event was rare in Abbottabad, where the 33-year old had moved his family two years earlier for some "peace and quiet."[1] Sohaib used his Twitter account named @ReallyVirtual to report the situation and express his displeasure. "Go away helicopter - before I take out my giant swatter :-/."[2] After hearing a loud crash and talking to friends online, he sent another real-time report: "Since taliban (probably) don't have helicpoters [sic], and since they're saying it was not 'ours', so must be a complicated situation."[3] Throughout the morning, he continued to send short messages, or "tweets," reporting new developments. He mapped the location of the "helicopter/UFO" crash site, explained that there actually had been two helicopters, shared rumors that were spreading around town, and reported that the Pakistani Army was conducting door-to-door searches after cordoning off the crash site. He also took time to apologize to the pilot for his earlier "swatter tweets." Nine hours after sending the first of numerous dispatches, Sohaib realized what he had just witnessed: "Uh oh, now I'm the guy who liveblogged the Osama raid without knowing it."[4]

Sohaib, an accidental journalist, emerged as an instant celebrity. Media inundated him with interview requests and he became the first Pakistani to amass more than 100,000 followers on Twitter.[5] But more remarkable is that even a clandestine mission—the U.S. raid on Osama bin Laden—did not escape the real-time, global reporting of citizen journalists. Welcome to the new operating environment where individuals and groups are empowered by communication tools that are "global, social, ubiquitous and cheap."[6]

Simply stated, this new information landscape enables average citizens to communicate, collaborate, and mobilize at a speed and scale never seen before, thereby presenting both unique

opportunities and threats to organizations as they pursue their goals. Governments, businesses, non-profits, and other organizations must adapt to these changes, which have made communication an increasingly complex endeavor yet no less vital to organizational success. To illustrate these points, this paper will discuss: 1) the relevancy of communication/public relations and its role in organizations, 2) the communication changes that have occurred since the mid-twentieth century, and 3) the implications of these changes. Three case studies will further illustrate the above points.

The fact that the information environment has changed is widely accepted, likely a result of personal observation and practice. New technology like the Internet and mobile phones affect everyday life; usage of Facebook and YouTube have become commonplace. However, it is less clear if the implications of new technology or the significance of social media are understood. It is not uncommon to read about an organization experiencing a "social media crisis" due to unpreparedness, or to hear people, ranging from average citizens to senior-level leaders, mock the use of these tools. Some rhetorically ask why they should care about the mundane content being shared, such as a funny dog video or what someone had for lunch.

Sentiment that social media have limited value is understandable, but it ignores a larger point. Historically, two distinct styles of communication existed: *private personal* communication via communications media (e.g., mail, telegraph, phone) and *public impersonal* communication through broadcast media (e.g., newspapers, radio, television).[7] Today, social media enable personal communication to be widely viewed, even if its originators only intended to communicate with friends. Thus, it is not surprising that much of personal communication via the Internet involves conversational chitchat, not unlike face-to-face or phone conversations. However, preoccupation with and dismissal of the personal communication side of social media

ignore its full capability: the ability to reduce barriers, thereby enabling collaboration and group action. In both uses—chitchat or collective action—social media complement the social nature of humans and provide a way to channel users' motivations and agendas.[8] Thus, these tools should not be so easily dismissed.

Terminology

At the outset of analyzing the new communication landscape, an explanation of terminology is important. The term *communication* refers to the social activity where people interact and exchange information; it is people focused.[9] In contrast, the term *communications* refers to the means of communication, such as computers, telephones, and radios; it is equipment focused. The term *publics* represents groups of people who share a common interest in a given situation or problem; *key publics* are those who "affect or are affected by the organization as it identifies and pursues its mission."[10] Lastly, *communication environment* is used in place of the doctrinal term *information environment* to emphasize the centrality of people and dialogue to the communication process.[11]

Why Organizational Communication Matters

In 1984, a team of six public relations academics and practitioners began a 15-year research project named the Excellence study.[12] By researching over 300 organizations in the United States, Canada, and the United Kingdom, the team sought to determine the value that communication and public relations programs provide to organizations. After conducting an extensive literature review and quantitative and qualitative research, the team concluded that organizations with "excellent" public relations and communication departments contributed to organizational effectiveness by establishing quality, long-term relationships with key publics and reconciling an organization's goals with its publics' expectations—all of which had monetary

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value to organizations.[13] The researchers found that communication departments that were "excellent" exhibited twenty key characteristics, such as participation in organization decision-making, the practice of two-way and symmetrical communication with publics, and the use of research as a listening and learning tool.

Using organizational theory as a framework, Excellence researchers introduced a new paradigm of public relations: the strategic management, or behavioral, paradigm. They rejected the more conventionally-practiced interpretive, or symbolic, paradigm. This interpretive model of public relations defines communication's role as influencing how publics interpret an organization, thereby *buffering* the organization from its environment and allowing the organization to "behave in the way it wants."[14] As such, public relations practitioners view their job as "messaging," publicity, and media relations; they focus on creating communication products and information campaigns aimed at building a good reputation for the organization. By contrast, the strategic management paradigm views communication not as a means to "buffer" an organization from its publics, but rather as a means to "bridge" the two entities through mutually beneficial relationships. It uses two-way communication and a broad array of communication activities as a "means of interacting with publics and bringing information from the [external] environment into organi[z]ational decision-making."[15] In this paradigm, an organization seeks a good reputation based on behavior, not on a publicity campaign.

Recognizing that communication *with*, and not just *to*, key publics has become more important, organizations have sought to improve the communication models they employ. Many Fortune 500 companies now practice the strategic management paradigm.[16] In companies like IBM and The Coca-Cola Company, communication professionals hold positions equal to other key company leaders and sit at the decision-making table.[17] The U.S. government also has

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begun to pay increasing attention to strategic communication and its importance in achieving strategic goals.[18]

This focus on strategic communication reflects an understanding of the importance of "soft power" and "smart power," two terms coined by Joseph Nye, an international relations theorist and professor, and former assistant secretary of defense. Soft power uses persuasion and attraction to "shape or reshape preferences without resort to force or payment;" it is about getting others to "want what you want."[19] This stands in contrast to hard power, which uses coercion, threats, and payments to obtain desired outcomes. Nye asserts that "smart" power combines both hard and soft power, and that "smart" strategies should employ all available tools, including communication. He further explains: "Conventional wisdom has always held that the state with the largest military prevails, but in an information age it may be the state (or non-state) with the best story that wins."[20]

Today, government reports emphasize the importance of "dialogue" and "mutual understanding" with key publics,[21] and state that the U.S.' ability to communicate credibly with key publics is vital to national security and the achievement of the nation's strategic objectives.[22] Additionally, Department of Defense reports note how strategic communication can "help prevent and limit conflicts [and] enhance responses to global challenges," asserting that "in the information age, no... military strategy can succeed" without it.[23] However, the same Defense reports lament the poor state of the military's communication apparatus; they further contend that a radically evolving information environment exacerbates the existing problem. One defense expert explains it this way; information is a "new element of power that has emerged in the last thirty to forty years and has subsumed the rest... A revolution happened without us knowing or paying attention."[24] Even the Chairman of the Joint Chiefs of Staff has weighed in, personally

endorsing the importance of communication as well as "what our actions communicate."[25] The Excellence theorists agree with this premise, that organizations must align their words and deeds to be credible in the eyes of their publics.

Any organizational success—whether a business success in California or a military success in Afghanistan —relies on support from key publics. And it remains true that effective communication is key to gaining that support. Yet, organizational communication has become increasingly more complex.

History: A Changing Communication Environment

As social creatures, humans throughout time have always exhibited a strong desire to produce, consume and distribute information, even at great personal cost.[26] Irving Fang, a professor of communication history, explains that the current information age is only one among "a series of social revolutions that define and span recorded history."[27] Means of communication have always evolved, and the adoption of new communication tools by societies has affected political organizations, economic growth, social activity and individual behavior. Fang clarifies, however, that the relationship between social change and media development has always been one of cause and effect. Communication technology itself does not change society; rather it links means to a purpose whereby people take action and create change. These conditions can result in information revolutions that, in turn, can lead to an "equalizing of the status of members of society."[28]

Irving identifies six information revolutions in Western history. Three occurred from the eighth century B.C. to the nineteenth century. First was the writing revolution, beginning in Greece with the convergence of the phonetic alphabet and papyrus. Second was the printing revolution in Europe in the mid-1450s, resulting from the convergence of paper and Johannes

Gutenberg's invention of the movable type printing press. Third was the mass media revolution in Europe and the United States during the mid-1800s, resulting from the convergence of the telegraph, and improvements in printing press and paper production technology. The last three more recent revolutions—the entertainment revolution, the home-based communication revolution, and the information highway revolution—will be covered below.

Twentieth Century Changes

In the 1900s, the information environment continued to change. Radio was introduced in the 1920s and television in the mid-1940s. As Americans enjoyed these new sources for news and entertainment, the newspaper business began to suffer after two centuries of dominance. In 1963, television and its major networks—NBC, CBS and ABC—surpassed newspapers as the main source of news for Americans.[29] Due to the exorbitant cost of running a media outlet— whether television or print—news organizations remained limited in number. Since the public had few options, the news organizations attracted mass audiences. There were even fewer options overseas, where governments owned most of the media.[30]

Cable television and the Internet changed all of this. Though in existence in some form or fashion since the 1940s, cable television truly emerged in the late 1970s with the introduction of such channels as HBO and C-SPAN. Cable continued to grow in the 1980s and the number of channels exploded in the 1990s due to improved cable technology and direct-broadcast satellite television. In June 1980, America witnessed the launch of CNN, television's first 24-hour, all-news network. Cable news' "breakthrough moment" came with CNN's coverage of the 1991 Persian Gulf War, which gave a front row seat to Americans who proved "unwilling to be unplugged."[31]

Another critical technological development was creation of the World Wide Web in 1989 and Web browsers in the early 1990s, enabling people to access content on the Internet. These developments kicked off the Internet boom, leading to the commercialization of the Web. Search engines such as Yahoo and email providers such as Hotmail became increasingly available. New Web-based media sites began to appear, such as the Drudge Report in 1997.[32] These provided people yet another alternative to traditional media and cable channels.

Major changes also took place in the international arena. In the Middle East, governments lost control over information with the introduction of the Internet and independent, transnational media organizations like Al Jazeera Arabic and Al Arabiya, which broke "taboos" such as reporting on human rights issues and interviewing Arab dissidents.[33] Other nations around the world moved to the American model for television, where private organizations owned channels supported by advertising revenue.[34]

Twenty-first Century Changes

In the early 2000s, another major phenomenon gained popularity: social media. Also known as "new media," social media are different means by which people, enabled by new technology, take an active and participant role as producers, aggregators, and distributors of information via Internet and mobile technology. Social media take many different forms that include, but are not limited to: blogs (e.g., Blogger, WordPress); microblogs (e.g., Twitter, Tumblr); wikis (e.g., Wikipedia, Wikinews); video-sharing (e.g., YouTube, Vimeo); photo sharing (e.g., Flickr, Picasa); music sharing (e.g., Bandcamp, MySpaceMusic); presentation sharing (e.g., SlideShare, scribd); social networking sites (e.g., Facebook, Google+); social bookmarking sites (e.g., Delicious, Google Reader); and social news sites (e.g., Digg, Reddit).

Social media adoption rates have been remarkable. Facebook, which launched in 2004 with a mission to "make the world more open and connected," has more than 845 million active users, with more than 483 million returning to the site daily.[35] To illustrate the scope of its reach, if Facebook were a country, it would be the third most populous nation in the world.[36] YouTube, founded in 2005, has more than 800 million unique visitors to the site each month. These visitors watch more than 4 billion videos a day and upload 60 hours of video every minute.[37] To provide perspective, users upload more video to YouTube in one month than the three major U.S. television networks created in 60 years. Twitter, a "real-time information network" that launched in 2006, has more than 100 million active users who send 200 million "tweets" a day.[38] Reading this much content—although each tweet is, at maximum, 140-characters long—would take a person 31 years.

Internet and social media usage are not just a North American phenomenon but also are a global one. In total, Internet users grew from 361 million in March 2000 to 2.27 billion in December 2011—an increase of 528%.[39] Approximately 45% of Internet users are in Asia; 22% are in Europe; 12% are in North American; 10% are in Latin America and the Caribbean; 6% are in Africa; 4% are in the Middle East; and 1% is in Australia and Oceania. However, analyzing Internet penetration within each area provides a clearer picture of Internet use. In this category, North America leads, with approximately 79% of its population using the Internet. Penetration rates include 68% in Australia and Oceania; 61% in Europe; 40% in Latin America and the Caribbean; 36% in the Middle East; 26% in Asia; and 14% in Africa. Despite the low penetration rates in many areas of the world, Internet growth has been exponential in these areas. For example, in Africa, Internet users have grown 2,998% since the year 2000.[40] In the Middle East, users have grown 2,245%, with more than half of each country's population having access

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in Bahrain, Israel, Palestinian Territories, Oman, Qatar, and the United Arab Emirates.[41] In

South America, Internet users have increased 1,205%.[42] These statistics reveal that developing

countries are beginning to catch up to developed countries in terms of Internet usage.

Social media use also is a global phenomenon. In December 2011, more than 80% of

Facebook's users lived outside of the United States and Canada.[43] In addition to Facebook, other

social networking sites reign, such as VKontakte in Russia,[44] RenRen in China,[45] and Orkut in

Brazil.[46] Participation levels are high. According to 2010 data, Internet users in China, Russia

and Mexico are more active social media users than Americans when it comes to social

networking, uploading photos and video, blogging, and micro-blogging.[47] Chinese government

censorship of western social media platforms has not prevented participation by the Chinese

citizens, who have created their own domestic platforms. As a result, more than 89.7 million

Chinese blog, 117.7 million upload photos, and 53.2 million have a profile on a social network.[48]

A review of Irving Fang's six information revolutions provides perspective to the recent

pace of change. It took 1,700 years to move from the writing revolution to the printing

revolution, and only 200 years to see the last four overlapping revolutions.[49] The pace of change

continues to accelerate, as evidenced by the social media explosion. Why does this matter? As

social media theorist Clay Shirky explains, the social nature of humans means that

communication tools are central to human life, so "when we change the way we communicate,

we change society."[50]

Analysis: A Changing Information Environment

During the majority of the twentieth century, two separate and distinct types of media

dominated: communications media and broadcast media. Communications media enabled

personal communication. Technology such as telegrams, telephones, faxes and mobile phones

facilitated two-way communication between two people. With the introduction of email and text messages, groups could now participate in discussions with each other. Traditional broadcast media, on the other hand, involved (and remains) impersonal, one-way communication.

Broadcast Communication Model

Broadcast media, also known as traditional or mass media, resulted in a specific model, or style, of communication. The broadcast communication model applies to any medium that involves a small number of producers and a large number of consumers. Like a megaphone, broadcast media enable one-way communication from the sender (the media) to a receiver (the mass audience). There is no interaction or dialogue between the two parties; the audience is merely a passive consumer.

This model reigned for the majority of the 1900s. Due to the high cost of creating, and then publishing or broadcasting content, only a limited amount of news could be distributed to the public. Thus, news and content generation was a top-down process, with editors and journalists serving as gatekeepers of information. These professionals decided what was important and newsworthy, and filtered good content from mediocre content. Thus, they provided the audience access to news and information—a necessary and desirable social function—but also controlled the audience's access to additional or alternative information.[51] News creation also followed a predictable timeline, since news was only published or broadcast once or twice a day. Thus, organizations responding to media requests, even during times of breaking news, usually had a fair amount of time to generate a response.

For the mass audience, the news cycle matched the cycle of everyday life, beginning with the morning paper and ending with the evening newscast. Newspapers were thrown out at the end of the day and news programs only aired once. Thus, even the biggest news stories were

perishable, only retrievable via library microfiche or film. This made news fleeting, often only known and remembered by those who witnessed it. The limits of existing technology also ensured that only an American audience attended to domestic and international news reported by American journalists. Foreign audiences rarely heard or read American news reports, so people interviewed by the media did not have to worry about the potential international implications of their comments. Geographical limitations made U.S. news an American, not global, experience.

Narrowcast Communication Model

Cable and satellite television, and then the Internet, ushered in the first major changes to the communication landscape since World War II, altering several but not all of the broadcast model's characteristics. These changes led to a new communication model: the narrowcast model. The term "narrowcasting" originated in a 1967 report by visionary and computer scientist J. C. R. Licklider, who rejected the "monolithic mass-appeal, broadcast approach" and who outlined a future scenario of multiple television networks serving the needs of smaller and more specialized audiences.[52] While both the broadcast and narrowcast models employ centralized control and one-way communication, the narrowcast model involves dissemination of content to a limited audience based on similarities such as interests and geographical location. This contrasts with the broadcast model, which employs broad message deployment to a mass audience. Early examples of narrowcasting include an all sports channel (ESPN, launched 1979), an all news channel (CNN, launched 1980), and an all music video channel (MTV, launched 1981). Similar trends occurred on the Internet, as traditional media organizations launched online news sites and as niche websites emerged (e.g., Newsmax.com, the Huffington Post, Politico). While the "journalist" still remains at the center of the model, the narrowcast model broadens the definition of what constitutes a journalist.[53]

Four major changes occurred with the introduction of cable and the Internet. First, news outlets began to report news in real-time, 24-hours a day. This meant that organizations had very little time to respond to a media query, especially during times of breaking news. Second, the media landscape began to fragment into smaller pieces as the number of producers and media channels increased. Thus, communication was no longer as efficient as it had been with the broadcast model; no longer could an organization give an interview to the three major news networks and be heard by the majority of Americans. Third, news was no longer perishable and fleeting. Users could easily find any story or information on the Internet; information could be accessed and used indefinitely by supporters and detractors. Fourth, the reach of news and information became global as world audiences gained access to the Internet and cable satellites. Global reach was a game changer; as one famous saying goes, "if bin Laden didn't have access to global media, satellite communications, and the Internet, he'd just be a cranky guy in a cave."[54]

Networked Communication Model

In the early 2000s, new social media technology and platforms sparked a dramatic and irreversible shift in how humans receive and share information, how they communicate with each other, and how they form opinions and groups.[55] No longer restricted to a broadcast or narrowcast model, the communication environment is now best described as a massive network. Development of this new "networked" communication model continues at a rapid pace, largely fueled by citizen participants. Remarkably, journalists—who have been at the center of past communication models—are no longer required; in the networked communication model, there is no center.

As discussed earlier, individuals historically have been consumers who were told what information was newsworthy by the media, government and other professionals. Events or

subjects considered unimportant or irrelevant by the media often went unreported and therefore unnoticed. Contrast that with today, when new and accessible technology has empowered the group known as "the former audience."[56] Those readers, viewers and listeners now have become part of the news-making process as they "react to, participate in, and even alter a story as it is unfolding."[57] Career journalist Dan Gillmor explains that while news used to be a lecture from the mass media that you chose to believe or not, news has now become more like a conversation or seminar with citizens. In fact, citizen journalists often originate and drive news stories covered by traditional media.[58] Bloggers have become a potent information force, as are citizens who capture video and photos of newsworthy events. Thus, it is citizens who now frequently write the "first draft of history." And with more people around the world documenting events, news and information are shared at faster than ever before. CNN's 24-hour news cycle now has been replaced by Twitter's 24-second news cycle.[59] Citizens have used Twitter to break news stories ranging from the terrorist attacks in Mumbai, India,[60] to the death of Whitney Houston.[61]

Other significant shifts are occurring. When it comes to preferred platforms for news, Americans continue to turn away from traditional mediums such as newspapers, magazines, radio, local television, network television, and cable.[62] Instead, Americans are increasingly turning to digital platforms where they can select the kind of news and information they want, delivered when and where they choose, in the tone and format they prefer.[63] These preferences are possible due to a proliferation of alternative information sources and Internet- and mobile-based technology that consequently allow people to filter out content that conflicts with their beliefs and preferences. Additionally, when searching for news, sophisticated algorithms of search engine software like Google have replaced editors, producers and publishers in deciding who is considered an "expert" and what information is viewed as "important." These changes

have led to significant shifts in credibility; citizens are becoming increasingly skeptical of what used to authoritative information sources and instead trust information from "a person like themselves."[64] Being *in authority* (i.e., in a position of power) is no longer as relevant as being *an authority* (i.e., someone who is trusted).

As technology has collapsed the cost of publishing, newly empowered citizens are actively creating and publishing online content. Unlike traditional top-down, one-way communication structures, social media facilitate instant, virtual and individualized online *conversations* between networks of people. These networks have redefined "communities," allowing groups to form around common interests and wants regardless of circumstance or geographic location. At relatively little cost, users can now push their agendas to sympathetic audiences; issues that otherwise would have remained local can now become global. No longer are world politics solely left up to governments; individuals, non-governmental agencies and even terrorists are now able to play "direct roles" in domestic and foreign policymaking.[65]

This increase in creators and publishers has caused further fragmentation of the media landscape, resulting in more channels with smaller audiences. Whereas in the past information was a scarce resource, attention is now becoming the scarce resource as people experience information overload and struggle to filter content. Younger people are now trusting that if information is important enough, *it* will find *them* through their personal networks.[66] Research shows that there might be merit to this assumption; online news websites are receiving increasing traffic originating from social media.[67]

This "democratization of information" means several things. First, power is shifting from states to non-state actors. Political scientist Joseph Nye explains that while "states will remain the dominant actor on the world stage...they will find the stage far more crowded and difficult to

control."[68] A participatory and networked communication landscape also means that other powerful organizations, such as corporations, have lost the ability to control content and information flow. These changes present substantial communication challenges to organizations; yet they also provide them opportunities. Second, these changes mean the communicator's job has becomes exponentially more difficult. As people experience information overload and become more selective in their information choices, organizations will have to work harder to be heard, let alone understood. No longer can communication be a fire-and-forget weapon, simply "sending a message" to a "target audience." Rather, organizations must engage and dialogue with key publics—publics who increasingly demand transparency and social responsibility.

Three Case Studies

Case Study I: Crowdsourcing Crises and Crime

On January 14, 2010, a magnitude 7.0 earthquake hit Haiti. As the largest recorded earthquake in the country, it affected more than 3 million people—a third of the country's population. The devastation was immense, and relief workers faced numerous challenges: 1) loss of government and aid personnel; 2) damaged infrastructure such as road networks; 3) disrupted services such as electricity and water; and 4) limited communications services.[69] Relief workers also had to deal with a lack of real-time data detailing the extent of damage, where relief was needed most, and how to get assistance there. While these challenges were not necessarily unique to major disasters, one unique circumstance did exist during the massive relief effort. Average citizens, not physically present in Haiti but empowered by social media technology, contributed directly to the relief effort on the ground.

Contributions were made through a phenomenon called "crowdsourcing." This occurs when a job traditionally performed by an expert is "outsourced" to an undefined but usually large

group of people (i.e., "the crowd") in the form of an open call for assistance.[70] According to the term's originator, journalist Jeff Howe, crowdsourcing "uses technology to foster unprecedented levels of collaboration and meaningful exchanges between people from every imaginable background in every imaginable geographical location."[71] This is exactly what happened in Haiti after calls for support spread via blogs, Twitter and Facebook.[72]

Relief workers communicated their lack of detailed maps and comprehensive databases on Haitian infrastructure and the population. In response, the volunteer group CrisisMappers and other volunteers from around the world used high-resolution satellite images and wiki software on Openstreemap.com to collaboratively identify roads, obstacles, destroyed bridges, damaged buildings, and camps of displaced Haitians. The end result was the "most authoritative map of Haiti in existence"—a map that proved vital to the efforts of the United Nations, NGOs and the U.S. military on the ground.[73] What normally would have taken years for experts on the ground to create was accomplished in the virtual space in a matter of days.

Another challenge for relief workers was to determine what type of aid was needed by Haitians and where. Two hours after the earthquake hit, volunteers in Boston set up a program using a crisis-mapping platform called Ushahidi, which Kenyan citizen journalists had developed to map violence after fallout from Kenya's December 2007 election. The new Ushahidi-Haiti program enabled aid workers to receive communication from Haitians needing assistance, ranging from requests for potable water to help for people trapped under buildings. Volunteers established a toll-free number (4636) requiring very little bandwidth that Haitians could use to text emergency messages with their cell phones. The Haitian government then worked with local and national radio stations to advertise the number and get the word to the population. Upon receiving a text, relief volunteers translated the report and tagged it in near real-time to the

appropriate geographic coordinates on a publically displayed interactive map. Workers on the

ground in Haiti used this information to direct relief efforts. The response was tremendous; in

the first month, Haitians sent more than 40,000 texts. However, language challenges existed:

texts were usually in Creole and contained location information only known to Haitians—not to

the English-speaking aid volunteers. Through personal networks, the Haitian Diaspora heard

about Ushahidi's effort, and 10,000 Haitian Americans volunteered to translate the texts from

afar. With this manpower base, each text was translated in less than 10 minutes.[74] And when

translators required additional information, like a location, volunteers could text the Haitian

sender a text back with a question. While the Ushahidi-Haiti program primarily relied on mobile

phones and text messages, volunteers around the world also searched Internet-based platforms

such as Twitter for emergency messages and then incorporated them into the map database.[75]

Social media have not only changed people's sense of connection to disaster-struck

countries, but have also given them a role in crisis response. While social media are not a cure-

all, they have become a valuable part of the early warning of and response to disasters. Ushahidi

also has served in other constructive capacities around the world: in the U.S. to map crime[76] and

to report problems during severe weather storms;[77] in India to monitor elections and report power

outages;[78] and in Africa to report medicine shortages.[79]

Case Study II: Protesting Kit Kat and Orangutan Fingers

Greenpeace, the world's largest independent, international environmental organization,

explains on its website that it has no permanent allies or enemies. It does, however, have a

vision of a "green and peaceful" world; it also has 2.8 million supporters who use non-violent

direct action to bring "enormous pressure to bear on power-holders" who commit environmental

abuses.[80] Thus, it is no surprise that Greenpeace objected to Nestlé's continued purchase of palm

oil from suppliers who destroyed rainforests—the habitat of Indonesia's endangered

orangutans—in order to plant palm oil plantations. Two years after Nestlé was provided

evidence of rainforest destruction, the company (unlike the Kraft and Unilever companies) took

no corrective action.[81] In March 2010, Greenpeace United Kingdom launched a deliberate social

media assault for which Nestlé was unprepared.

Greenpeace's "brand jacking" campaign was well-planned. It involved several

components: 1) development of a comprehensive website; 2) the use of Facebook, Twitter and

video-sharing sites; 3) the creation of a logo that mimicked Nestlé's candy logo but replaced the

words "Kit Kat" with the word "Killer;" and 4) the creation of a new Kit Kat slogan using a cute

orangutan to request that Nestlé "Give orangutans a break."

Greenpeace's first move was to post a video on YouTube that parodied Kit Kat

commercials. In the video, an office worker believes he is breaking off and subsequently eating

a Kit Kat bar without realizing that it is actually an orangutan's bloody finger. Nestlé, upon

learning of the provocative video, had the video removed from YouTube, citing copyright

infringement. This incited Greenpeace and its followers, who believed Nestlé was trying to

censor them—a move they called "just so... *last century*."[82] Soon, supporters shared the news

with their social networks and posted the video all over the Web—not just on YouTube—

causing it to go viral. Nestlé had two options: to let the issue go or to try to play the virtually

impossible game of Internet "whack-a-mole." Nestlé chose the former. But the damage had

been done; the scuffle increased mass media coverage and public awareness of the issue.

After encouragement from Greenpeace, the fight moved to Twitter and Nestlé's Facebook

page, where supporters posted negative comments and aired grievances. Facebook supporters

replaced their own profile pictures with the "Killer" logo or pictures of orangutans, which

appeared alongside their chastising comments. Exacerbating the situation, a Nestlé

representative responded in an insulting manner despite Facebook being a platform where

authenticity and two-way communication are *de rigueur*; he began correcting grammar mistakes

and threatened to delete comments by users with the "Killer" logo. This set off another social

media firestorm and resulted in even more mainstream media attention. Nestlé, apparently not

knowing what else to do, went silent, essentially "allowing a free-for-all of anger and in some

cases, inaccurate information" that remains searchable on the Internet today.[83]

Two months after the Kit Kat campaign launched, Nestlé announced a new "zero

deforestation" policy, stating it would no longer buy palm oil from companies linked to

deforestation. Nestlé also announced a partnership with The Forest Trust to combat the practice.

Nestlé's about-face demonstrates the power of online communities that can now organize and

publish content using the same techniques and methods once reserved only for corporations

launching expensive marketing campaigns.[84] It also serves as an example of what can happen

when an organization is not prepared for the new environment despite their presence on social

media platforms. This is not to say that avoiding social media will help either; detractors will

still boycott, conduct coordinated attacks, and fill the social media space left by an organization's

absence.[85]

Case Study III: Mobilizing for Revolution

Social media can also be used to mobilize citizens against governments. The Egyptian

uprising that began on January 25, 2011, is a well-known event among the world's population.

While few would disagree that it was a remarkable event, debate continues about the role social

media played in ousting Egyptian President Hosni Mubarak. Critics question social media's

importance.[86] One journalist described it as a "very old-fashioned, almost nineteenth century

revolution [where] [p]eople see other people going out on the streets and decide to join them."[87] Others disagree, asserting that social media played a powerful role in the uprising. They cite as proof the Egyptian government's desperate decision to cut off Internet service after tens of thousands of Egyptians took to the streets in the initial three days of protests. It was a move without precedent in Internet history,[88] and one that cost Egypt an estimated $90 million in revenue.[89] To understand social media's role, one must consider if without these platforms the popular uprising would have been possible, let alone successful.

Beginning in December 2010, Egyptian activist and opposition groups began using social media to mobilize Egyptians for a demonstration in Cairo against police abuse on January 25, 2011—National Police Day. Such political activism, while limited, was not new in Egypt. As early as 2004, Egyptian bloggers began posting videos and photos of government brutality and calling for Mubarak to step down.[90] Egyptian workers, frustrated by "the degree of corruption, dictatorship, economic distress, and humiliation they had been suffering for a long time" organized strikes in 2006 and 2007.[91] In 2008, Internet activists joined the effort, promoting a strike by textile workers on April 6. These strikes failed to bring about substantial change since they attracted only a limited crowd that the police were able to suppress. Activists knew they needed a means to "achieve public mobilization on a massive scale."[92] The use of the Internet during the 2008 strike demonstrated the Internet's potential for mobilization, as did the government's unsuccessful attempts to censor social media networks. Activists were further invigorated when Facebook launched support for Arabic script in 2009, no longer limiting their communication to English.[93]

To mobilize citizens for the planned January 25 protest, Egyptian activist organizations such as We Are All Khaled Said, the April 6 Youth Movement, and the National Association for

Change, coordinated their efforts and used platforms like Facebook and Twitter. The success of

Tunisia's revolution in mid-January provided needed encouragement, as explained by Internet

activist Wael Ghonim:

> The victory of the people of Tunisia would send a strong message... to our Facebook page members: we can effect change in Egypt... [Our] political, economic, and social conditions were worse than Tunisia's, and the level of anger on the street was much greater. The only thing that separated Egyptians from a revolution was our lack of self-confidence and our exaggerated perception of the regime's strength. Yet after what happened in Tunisia, I thought the Egyptian masses might finally get the message and break the psychological barrier of fear.[94]

Following the ousting of Tunisia's president, Egyptian activists gained confidence and

renamed the protest the "Revolution Against Torture, Poverty, Corruption, and

Unemployment."[95] Through a well-organized social media network, activists encouraged

citizens to take to the streets, recruit others, and publicize the event on Internet sites and within

online communities. Facebook served as a central command and rallying point where people

received instant updates and could debate and strategize with each other. A base of support for

the protest began to build. One Egyptian woman posted an inspiring video where she identified

herself by name and called on Egyptians to fight oppression. More than a hundred Egyptian

photographers volunteered to take pictures at protests, providing a form of protection since

security forces were unlikely to commit violence in front of cameras. More than 90,000

Egyptians pledged on Facebook to attend the event.[96] Youth volunteers disseminated mass text

messages, met with various leaders to recruit their networks, and engaged in old-fashioned street

activism to reach people without Internet and encourage their participation.

On January 25, tens of thousands of Egyptians participated in the protest.[97] Three days

later, the regime shut off the Internet, mobile phone service, and Al Jazeera Arabic. The move

backfired, as it drew international criticism, bolstered international support for the protestors, and

pushed more Egyptians onto the streets. The number of protestors increased to a million—a ten-fold increase. Activists and media, aided by individuals around the world and companies like Google, found workarounds that allowed them to continue communicating with the domestic and international publics. Once Internet was restored on February 2, Internet participation increased as a million more Egyptians joined Facebook. By that time, more than 32,000 Facebook groups and 14,000 Facebook pages existed.[98] Protests continued for eighteen days until international support for Mubarak disappeared. On February 11, Mubarak resigned after three decades of rule.

Social media filled two major roles during the revolution: 1) as an organizational and mobilization tool with broad and immediate reach, and 2) as a means to disseminate user-generated content to a local and global audience.[99] In addition to collaborating with others to plan the revolution, organizers used social media to publish persuasive calls-to-action, to encourage discussion among users, to facilitate the sharing of user-generated content, and to link to credible news sources that justified their cause. These actions built support for the protest by reducing a sense of fear and vulnerability; it broke down other barriers to mobilization such as the exaggerated perception of the regime's strength, just like Wael Ghonim had hoped. The decentralized nature of social media enabled a movement that was difficult, if not impossible, to control or silence. The movement's decentralized nature also enabled rapid, public, and global information dissemination through existing networks during the protest. In real-time, organizers could communicate with protestors to coordinate new actions, request medical or logistical support, share advice on how to construct barriers or respond to tear gas, alert protestors to police checkpoints, and share updates to boost collective morale. Also, social media linked protestors to international support groups and individuals who provided immediate assistance and advice.

In sum, social media "brought to the Egyptian people a sense of self-empowerment—through the capacity to speak and assemble—that was previously not there."[100]

Social media also served as a means for citizen journalism and mainstream media coverage, offering Egyptian and international audiences credible alternatives to Egyptian state media. Protestors armed with cell phones "live-tweeted" skirmishes between protestors and police; others took photos and video of the protests and police abuse and uploaded the content to social media sites. Al Jazeera, Al Arabiya, and western media agencies followed Twitter newsfeeds and downloaded visual content for dissemination to global audiences. This hybrid news system of old and new media resulted in rich coverage for viewers around the world and amplified events taking place in Egypt. User-generated content and media coverage had a powerful influence on international opinion and resulted in increased pressure on the regime by the United States and other countries.[101]

Egyptians continue to experiment with social media, with some success, as they shape their country's future.[102] Indicative of social media's current place in Egyptian society was the Egyptian prosecutor general's decision in March 2011 to announce Mubarak's detention on Facebook.[103] Yet, social media's future role remains to be seen. And only with time will we see how this revolution ends, and if it involves participatory and inclusive governance.

Conclusion

As discussed, citizens around the world collaborated via the Internet to help Haitians in their time of need. Greenpeace supporters used social media to attack Nestlé due to the destruction of orangutan habitat. Egyptians—mobilized and empowered by social media—took to the streets to protest government corruption, poverty, unemployment, and the rule of Hosni Mubarak. These are but a few examples among hundreds if not thousands that exist of the

potency of participatory media. Despite the disparate reasons why these groups were inspired to act, they all shared one unifying motivation: they wanted change. And as Irving Fang explains quite simply: when people want change, "an invention helps."[104]

Social media provide humans the advantage of "ridiculously easy group-forming." Social media theorist Clay Shirky further explains that the "desire to be a part of a group that shares, cooperates, or acts in concert is a basic human instinct that has always been constrained by transaction costs" such as money, time, effort and attention.[105] Now, new tools reduce the difficulties and costs for sharing, collaborating and taking collective action. New technology also facilitates communication and moves content at a speed and scale never seen before. Even Admiral William McRaven, who oversaw the elite military unit that conducted the Osama bin Laden raid and that normally shuns exposure, sees the inevitability of the new environment: "With the social media being what it is today, with the press and the 24-hour news cycle, it's very difficult to get away from it." He further asserts that the resulting scrutiny "helps focus our attention, helps us do a better job."[106]

Leaders today have to address the implications of these changes for their organizations. Such reflection is critical, for organizations have less "freedom of action and... ability to shape their future than they actually" perceive.[107] For some institutions, only a minimal amount of change is necessary; for others, substantial change is required. But change can be hard, as Clay Shirky explains: "Evidence that the ecosystem is changing in ways [an organization] can't control usually creates considerable anxiety, even if the change is good for society as a whole."[108] Yet the consequences for inaction, in terms of lost benefits and increased risk, can be significant. Therefore, organizations must review the role that communication plays in their organization and how they organize, train and educate, and equip (i.e., with software, technology) their

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communication departments and personnel. They must question if existing methods are sufficient to enable success in the twenty-first century operating environment.

Change in the communication landscape will no doubt continue at a rapid pace, providing people new ways to communicate and thereby increasing the environment's complexity. Yet, the same technology presents organizations with the means to thrive in these new conditions. It also presents organizations with an opportunity to change *how they view and employ* the communication function. When used as a means to engage publics and to increase understanding about the operating environment, new technology can facilitate a change in the communication function's mission, from one of "messaging" to one of relationship building.[109] When organizations shift from a focus of merely distributing information to one where communication practitioners are full-fledged participants in executive planning and decision-making, organizations will be better postured to attain their goals in the twenty-first century.

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[12]L. A. Grunig, J. E. Grunig, and D. M. Dozier, *Excellent Public Relations and Effective Organizations: A Study of Communication Management in Three Countries* (Mahwah, NJ: Lawrence Erlbaum, 2002).

[13]After conducting interviews with CEOs and senior public relations practitioners, the Excellence researchers discovered that organizations' good relationships with their key publics "had reduced the costs of litigation, regulation, legislation, and negative publicity caused by poor relationships; reduced the risk of making decisions that affect different stakeholders; or increased revenue by providing products and services needed by stakeholders." See J. E. Grunig, "Furnishing the Edifice: Ongoing Research on Public Relations as a Strategic Management Function," *Journal of Public Relations Research* 18, no. 2 (2006): 159.

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[16]Toni M. Falconi, "Engaging (and Grilling) the Social Side of James Grunig," *PRConversations.com*, October 15, 2008, http://www.prconversations.com/index.php/2008/10/engaging-and-grilling-the-social-side-of-james-grunig (accessed February 2, 2012).

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[18]Strategic communication (SC) is the process by which organizations coordinate and synchronize their actions and words to achieve a strategic goal. In a 2010 report to Congress, the Department of Defense called SC a "process of integrating issues of audience and stakeholder perception into policy-making, planning, and operations at every level...in support of national objectives... This involves listening as much as transmitting, and applies not only to information, but also [to] physical communication - action that conveys meaning." See www.carlisle.army.mil/ dime/documents/Strategic%20Communication%20&%20IO%20Memo%2025%20Jan2011.pdf

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